IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (currently amended): A method for generating antialiased lines, comprising the actions of:
 - for each respective line, determining which of a plurality of orientation classes that entire line falls into; and
 - performing subpixel sampling using one of a plurality of sampling patterns, in dependence on which of said plurality of orientation classes that line falls into;

wherein said determination is made without the use of an error term or pixel-by-pixel decisions.

- 2. (original): The method of claim 1, wherein said classes consist of x-major and y-major.
- 3. (original): The method of claim 1, wherein said orientation classes correspond one-to-one to said sampling patterns.
- 4. (canceled)
- 5. (currently amended): A method for antialiased rendering, comprising the actions of:
 - (a) identifying, for at least one respective entire line, which one of a limited number of directions is most nearly parallel to said line; and
 - (b) performing subpixel sampling on said line with a subpixel sampling pattern which has maximal resolution approximately normal to said one direction;
 - wherein said identification is made without the use of an error term or pixel-by-pixel decisions.



- 6. (original): The method of claim 5, wherein said number of directions is two.
- 7. (original): A graphics processor which is configured to implement the method of claim 1.
- 8. (original): A graphics processor which is configured to implement the method of claim 5.
- 9. (previously presented): The method of claim 2, wherein said classification of x-major and y-major depends on whether the x or y extent of the line is larger.
- 10. (previously presented): The method of claim 1, wherein said sampling patterns have the same number of sub-pixel sampling points.
- 11. (previously presented): The method of claim 1, wherein said sampling patterns have four sub-pixel sampling points.
- 12. (previously presented): The method of claim 5, wherein said sampling pattern has four sub-pixel sampling points.
- 13. (currently amended): A computer graphics system for generating antialiased lines comprising:
 - means for determining which of a plurality of orientation classes that a an entire line falls into; and
 - means for performing subpixel sampling using one of a plurality of sampling patterns, in dependence on which of said plurality of orientation classes that line falls into;
 - wherein said determination is made without the use of an error term or pixel-by-pixel [per pixel] decisions.
- 14. (previously presented): The system of claim 13, wherein said classes consist of x-major and y-major.

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- 15. (previously presented): The system of claim 14, wherein said classification of x-major and y-major depends on whether the x or y extent of the line is larger.
- 16. (previously presented): The system of claim 13, wherein said orientation classes correspond one-to-one to said sampling patterns.
- 17. (previously presented): The system of claim 13, wherein said sampling patterns have the same number of sub-pixel sampling points.
- 18. (previously presented): The system of claim 13, wherein said sampling patterns have four sub-pixel sampling points.
- 19. (currently amended): A computer graphics system for generating antialiased lines comprising:
 - means for identifying, for all of at least one respective line, which one of a limited number of directions is most nearly parallel to said line; and
 - means for performing subpixel sampling on said line with a subpixel sampling pattern which has maximal resolution approximately normal to said one direction;
 - wherein said identification is made without the use of an error term or pixel-by-pixel [per pixel] decisions.
- 20. (previously presented): The system of claim 19, wherein said number of directions is two.
- 21. (previously presented): The system of claim 19, wherein said sampling pattern has four sub-pixel sampling points.



- 22. (currently amended): A method for generating antialiased lines, comprising the steps of for each respective line:
 - determining which of a plurality of orientation classes that entire line falls into; and
 - performing subpixel sampling using one of a plurality of sampling patterns, in dependence on which of said plurality of orientation classes that line falls into;
 - wherein said determination is made without the use of an error term or pixel-by-pixel [per pixel] decisions.
- 23. (previously presented): The method of claim 22, wherein said classes consist of x-major and y-major.
- 24. (previously presented): The method of claim 23, wherein said classification of x-major and y-major depends on whether the x or y extent of the line is larger.
- 25. (previously presented): The method of claim 22, wherein said orientation classes correspond one-to-one to said sampling patterns.
- 26. (previously presented): The method of claim 22, wherein said sampling patterns have the same number of sub-pixel sampling points.
- 27. (previously presented): The method of claim 22, wherein said sampling patterns have four sub-pixel sampling points.





- 28. (currently amended): A method for generating antialiased lines, comprising the steps of:
 - identifying, for at least one respective entire line, which one of a limited number of directions is most nearly parallel to said line; and
 - performing subpixel sampling on said line with a subpixel sampling pattern which has maximal resolution approximately normal to said one direction:
 - wherein said identification is made without the use of an error term or pixel-by-pixel [per pixel] decisions.
- 29. (previously presented): The method of claim 28, wherein said number of directions is two.
- 30. (previously presented): The method of claim 28, wherein said sampling pattern has four sub-pixel sampling points.

